## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

1.(Currently Amended) [[-]]—Compounds—A compound of formula (1), characterized by:

[[-]]wherein:

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> can <u>independently</u> be a hydrogen atom, an acyloxy, alkyloxy, aryloxy, alkylthio, arylthio or alkyl group with C<sub>1</sub>-C<sub>10</sub> chains; in which the radical can be linear or branched alkyl with 1-10 carbon atoms, alkenyl with 2 to 10 carbon atoms, alkynyl with 3 to 10 carbon atoms, cycloalkyl with 3 to 6 carbon atoms, cycloalkyl with 4 to 6 carbon atoms or bicycloalkyl with 7 to 10 carbon atoms;

these radicals possibly being substituted by one or several identical or different substituents chosen from halogen atoms and hydroxy, alkoxy radicals containing 1 to 4 carbon atoms, piperidinyl, morpholinyl, piperazinyl 1 (possibly substituted at 4 by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl part of which contains 1 to 4 carbon atoms), cycloalkyl with 3 to 6 carbon atoms, cycloalkenyl with 4 to 6 carbon atoms, phenyl, cyano, nitro, carboxy or alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, or a phenyl radical, possibly substituted by one or several identical or different radicals, chosen from alkyl radicals with 1 to 4 carbon atoms or alkoxy radicals containing 1 to 4 carbon atoms, a saturated or unsaturated nitrogenous heterocyclic radical containing 5 or 6 members, possibly substituted by one or several alkyl radicals with 1 to 4 carbon atoms, understanding that the cycloalkyl, cycloalkenyl or bicycloalkyl radicals can possibly be substituted by one or several alkyl radicals with 1 to 4 carbon atoms; and

[[-]]Sc is the a characteristic side chain of steroids, of a linear or branched alkyl radical with 1-12 carbon atoms, an alkenyl radical with 2 to 12 carbon atoms, an alkynyl radical with 3 to 12 carbon atoms, a cycloalkyl radical with 3 to 6 carbon atoms, a cycloalkenyl radical with 4 to 6 carbon atoms, or a bicycloalkyl radical with 7 to 10 carbon atoms; these radicals possibly being substituted by one or several identical or different substituents chosen from halogen atoms and hydroxy, alkoxy radicals containing 1 to 4 carbon atoms, piperidinyl, morpholinyl, piperazinyl-1 (possibly substituted at -4-by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl-part-of-which-contains-1-to-4-carbon atoms), cycloalkyl-with 3-to-6-carbon atoms, cycloalkenyl with 4 to 6 carbon atoms, phenyl, cyano, nitro, carboxy or alkoxycarbonyl, the alkyl part of which contains 1-to 4 carbon atoms, or a phenyl radical, possibly substituted by one or several identical or different radicals, chosen from alkyl radicals with 1 to 4 carbon atoms, or alkoxy radicals containing 1 to 4 carbon atoms, a saturated or unsaturated nitrogenous heterocyclic radical with 5 or 6 members, possibly substituted by one or several alkyl radicals with 1 to 4 carbon atoms, understanding that the cycloalkyl, cycloalkenyl or bicycloalkyl radicals can possibly be substituted by one or several alkyl radicals containing 1 to 4 carbon atoms; and

[[-]]Sk is an amino acid chain analogous to that of to taxanes, in which P

represents is a phenyl group or an alkoxy radical with alkyl chains with 1 to 10 carbon atoms, alkenyl chains with 3 to 10 carbon atoms and alkynyl chains with 3 to 10 carbon atoms, cycloalkyl chains with 4 to 7 carbon atoms in the ring and cycloalkenyl chains with 4 to 7 carbon atoms in the ring, a phenyl or a heterocyclic compound, and Ar is an aromatic compound moiety.

2. (Currently Amended) [[-]] Compounds A compound of formula (2), characterized by:

[[-]]wherein:

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> can <u>independently</u> be a hydrogen atom, an acyloxy, alkyloxy, aryloxy, alkylthio, arylthio, or alkyl group with C<sub>1</sub>-C<sub>10</sub> chains; in which the radical can be linear or branched alkyl with 1–10 carbon atoms, alkenyl with 2 to 10 carbon atoms, alkynyl with 3 to 10 carbon atoms, eyeloalkyl with 3 to 6 carbon atoms, eyeloalkyl with 7 to 10 carbon atoms;

these radicals possibly being substituted by one or several identical or different substituents chosen from halogen atoms and hydroxy, alkoxy radicals containing 1 to 4 carbon atoms, piperidinyl, morpholinyl, piperazinyl-1 (possibly substituted at 4 by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl part of which contains 1 to 4 carbon atoms), cycloalkyl with 3 to 6 carbon atoms, cycloalkenyl with 4 to 6 carbon atoms, phenyl, cyano, nitro, carboxy or alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, or a phenyl radical, possibly substituted by one or several identical or different radicals, chosen from alkyl radicals with 1 to 4 carbon atoms or alkoxy radicals containing 1 to 4 carbon atoms, a saturated or unsaturated nitrogenous heterocyclic radical containing 5 or 6 members, possibly substituted by one or several alkyl radicals with 1 to 4 carbon atoms, understanding that the cycloalkyl, cycloalkenyl or bicycloalkyl radicals can possibly be substituted by one or several alky radicals with 1 to 4 carbon atoms; and

[[-]]Sc is a the-characteristic side chain of steroids, or a linear or branched alkyl radical with 1-12 carbon atoms, an alkenyl radical with 2 to 12 carbon atoms, an alkynyl radical with 3 to 12 carbon atoms, a cycloalkyl radical with 3 to 6 carbon atoms, a cycloalkenyl radical with 4 to 6 carbon atoms, or a bicycloalkyl radical with 7 to 10 carbon atoms; these radicals possibly being substituted by one or several identical or different substituents chosen from halogen atoms and hydroxy, alkoxy radicals containing 1 to 4 carbon atoms, piperidinyl, morpholinyl, piperazinyl-1 (possibly substituted at -4-by-an-alkyl-radical-with-1 to 4 carbon atoms or by a phenylalkyl-radical, the alkyl part of which contains 1 to 4 carbon atoms), cycloalkyl with 3 to 6 carbon atoms, cycloalkenyl with 4-to-6-carbon atoms, phenyl, cyano, nitro, carboxy or alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, or a phenyl radical, possibly substituted by one or several identical or different radicals, chosen from alkyl radicals with 1 to 4 carbon atoms, or alkoxy radicals containing 1 to 4 carbon atoms, a saturated or unsaturated nitrogenous heterocyclic radical with 5 or 6 members, possibly substituted by one or several alkyl radicals with 1 to 4 carbon atoms, understanding that the cycloalkyl, cycloalkenyl or bicycloalkyl radicals can possibly be substituted by one or several alky radicals containing 1 to 4 carbon atoms; and

[[-]]Sk is an amino acid chain analogous to that of to taxanes, in which P

represents is a phenyl group or an alkoxy radical with alkyl chains with 1 to 10 carbon atoms, alkenyl chains with 3 to 10 carbon atoms and alkynyl chains with 3 to 10 carbon atoms, cycloalkyl chains with 4 to 7 carbon atoms in the ring and cycloalkenyl chains with 4 to 7 carbon atoms in the ring, a phenyl or a heterocyclic compound, and Ar is an aromatic compound moiety.

3. (Currently Amended) [[-]] A process for preparing of manufacturing the a compound[[s]] of formula (1)[[,]] characterized, as the most important synthetic transformations, by the following steps:

## comprising:

a) alkylation of the kinetic enolate of the ketones carrying the CD ring of steroids, of general formula (3) to produce a compound of formula (5),

with the suitable alkylating agents of general formula (4),

obtaining as a reaction product compounds of general formula (5), wherein the Sc, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> groups have the structural characteristics indicated in claim 1, the X-group can be a halogen, a sulfonate group, any other good leaving group or a carbonyl group, and the Y group can be a methyl, propyl, ethyl or isopropyl group:

[[a]] b) allylation of the compound[[s]] of general formula (5) to produce a dienyne of formula (6) of the previous step a) in an inert solvent to obtain the corresponding alcohols of general formula (6),

wherein the Sc, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup> and Y groups have the characteristics described hereinbefore, and the R<sup>1</sup> group has the structural characteristics indicated in claim 1;

[[b]] <u>c</u>) metathesis cyclization reaction of the dienyne[[s]] of <del>general</del> formula (6) of the previous step b), catalyzed by metal carbene catalysts, typical for this type of processes and in a suitable solvent, obtaining products of general formula (7),

$$R^{5}$$
 $R^{6}$ 
 $R^{7}$ 
 $R^{7$ 

wherein the Sc, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> groups have the previously-given meaning;

d) subsequent modifications of functional-groups, such as exidations, reductions, esterifications, alkylations, isomerizations, etc., to give the compounds of general formula (1),

$$\begin{array}{c|c}
R^{6} & R^{6} & R^{7} & Sc \\
R^{4} & R^{8} & R^{9} & R^{1}
\end{array}$$

$$\begin{array}{c|c}
R^{7} & Sc & R^{6} & R^{7} & Sc & R^{6} & R^{7} & Sc & R^{6} & R^{7} & R^{6} & R^{7} & R^{7}$$

wherein the Sc, P, Ar, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> groups have the meaning previously given in claim 1.

4. (Currently Amended) [-] A process for preparing of manufacturing a the compound[[s]] of general formula (2), characterized, as the most important synthetic transformations, by the following steps

$$R^{1} \longrightarrow R^{8} R^{9}$$

$$R^{10} \longrightarrow A$$

$$R^{10}$$

# comprising:

a) alkylation of the <u>a</u>kinetic enolate of the <u>a</u>ketone[[s]] earrying the CD ring of steroids, of general formula (3) to produce a compound of formula (9),

with the suitable alkylating agents of general formula (8)

obtaining as a reaction product compounds of general formula (9), wherein the Sc, R<sup>‡</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> groups have the structural characteristics indicated in claim 2, the X group can be a halogen, a sulfonate group, any other good leaving group,

b) alkylation of the carbonyl group of the compound[[s]] of general formula (9) to produce a dienyne of formula (11), of the previous step a) in an inert solvent, with the corresponding organometallic compounds of general formula (10),

wherein the R<sup>3</sup>, R<sup>4</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> groups have the structural characteristics indicated in claim 2, M can be a metal having the characteristics of Mg, Li, Na, etc., and the Y group can be a methyl, propyl, ethyl or isopropyl group, to obtain the corresponding alcohols of general formula (11),

wherein the Sc, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup> and Y groups have the previously given meaning;

c) metathesis cyclization reaction of the dienyne[[s]] of general formula (11) of the previous step b), catalyzed by metal carbene catalyst stypical for this type of processes and in a suitable solvent, obtaining products of general formula (12),

wherein the Sc, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> groups have the previous meaning;

d) subsequent modifications of functional groups, such as oxidations, reductions, esterifications, alkylations, isomerizations, etc., to give the compounds of general formula (2),

wherein the Sc, P, Ar, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> groups have the meaning previously given in claim 2.

#### 5. - 10. (Canceled).

- 11. (New) The compound according claim 1, wherein at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$  or  $R^{10}$  is an acyloxy, alkyloxy, aryloxy, alkylthio, arylthio or alkyl group with  $C_1$ - $C_{10}$  chains substituted by
  - a linear or branched alkyl with 1-10 carbon atoms,
  - an alkenyl with 2 to 10 carbon atoms,
  - an alkynyl with 3 to 10 carbon atoms,
  - a cycloalkyl with 3 to 6 carbon atoms,
  - a cycloalkenyl with 4 to 6 carbon atoms, or
  - a bicycloalkyl with 7 to 10 carbon atoms,
- 12. (New) The compound according to claim 11, wherein said linear or branched alkyl with 1-10 carbon atoms, alkenyl with 2 to 10 carbon atoms, alkynyl with 3 to 10

carbon atoms, cycloalkyl with 3 to 6 carbon atoms, cycloalkenyl with 4 to 6 carbon atoms, or bicycloalkyl with 7 to 10 carbon atoms is substituted by one or several substituents selected from the group of:

- a halogen,
- an hydroxy group,
- an alkoxy radical containing 1 to 4 carbon atoms,
- a piperidinyl,
- a morpholinyl,
- a piperazinyl-1,
- a cycloalkyl with 3 to 6 carbon atoms,
- a cycloalkenyl with 4 to 6 carbon atoms,
- a phenyl,
- a cyano,
- a nitro,
- a carboxy,
- an alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, and
- a phenyl.
- 13. (New) The compound according to claim 12, wherein said piperazinyl-1 is substituted at -4 by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl part of which contains 1 to 4 carbon atoms.
- 14. (New) A compound according to claim 12, wherein said phenyl is substituted by one or several radicals, chosen from
  - an alkyl radical with 1 to 4 carbon atoms,
  - an alkoxy radical containing 1 to 4 carbon atoms, and
  - a saturated or unsaturated nitrogenous heterocyclic radical containing 5 or 6 members.
- 15. (New) The compound according to claim 14, wherein said saturated or unsaturated nitrogenous heterocyclic radical containing 5 or 6 members is substituted by

one or several alkyl radicals with 1 to 4 carbon atoms.

- 16. (New) The compound according to claim 11, wherein at least one of said cycloalkyl, cycloalkenyl or bicycloalkyl radicals is substituted by one or several alkyl radicals with 1 to 4 carbon atoms.
- 17. (New) The compound according to claim 1, wherein Sc is a linear or branched alkyl radical with 1-12 carbon atoms, an alkenyl with 2 to 12 carbon atoms, an alkynyl with 3 to 12 carbon atoms, a cycloalkyl with 3 to 6 carbon atoms, a cycloalkenyl with 4 to 6 carbon atoms or a bicycloalkyl with 7 to 10 carbon atoms substituted by one or several identical or different substituents chosen from
  - a halogen,
  - an hydroxy group,
  - an alkoxy radical containing 1 to 4 carbon atoms,
  - a piperidinyl,
  - a morpholinyl,
  - a piperazinyl-1,
  - a cycloalkyl with 3 to 6 carbon atoms,
  - a cycloalkenyl with 4 to 6 carbon atoms,
  - a phenyl,
  - a cyano,
  - a nitro,
  - a carboxy,
  - an alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, and
  - a phenyl.
- 18. (New) The compound according to claim 17, wherein said piperazinyl-1 is substituted at -4 by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl part of which contains 1 to 4 carbon atoms.
  - 19. (New) The compound according to claim 17, wherein said phenyl is

substituted by one or several radicals, chosen from

- an alkyl radical with 1 to 4 carbon atoms,
- an alkoxy radical containing 1 to 4 carbon atoms, and
- a saturated or unsaturated nitrogenous heterocyclic radical with 5 or 6 members.
- 20. (New) The compound according to claim 19, wherein said saturated or unsaturated nitrogenous heterocyclic radical with 5 or 6 members is substituted by one or several alkyl radicals with 1 to 4 carbon atoms.
- 21. (New) The compound according to claim 1, wherein Sc is a cycloalkyl with 3 to 6 carbon atoms, a cycloalkenyl with 4 to 6 carbon atoms or a bicycloalkyl with 7 to 10 carbon atoms substituted by one or several alkyl radicals containing 1 to 4 carbon atoms.
- 22. (New) The compound according claim 2, wherein at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ ,  $R^9$  or  $R^{10}$  is an acyloxy, alkyloxy, aryloxy, alkylthio, arylthio or alkyl group with  $C_1$ - $C_{10}$  chains substituted by
  - a linear or branched alkyl with 1-10 carbon atoms,
  - an alkenyl with 2 to 10 carbon atoms,
  - an alkynyl with 3 to 10 carbon atoms,
  - a cycloalkyl with 3 to 6 carbon atoms,
  - a cycloalkenyl with 4 to 6 carbon atoms, or
  - a bicycloalkyl with 7 to 10 carbon atoms,
- 23. (New) The compound according to claim 22, wherein said linear or branched alkyl with 1-10 carbon atoms, alkenyl with 2 to 10 carbon atoms, alkynyl with 3 to 10 carbon atoms, cycloalkyl with 3 to 6 carbon atoms, cycloalkenyl with 4 to 6 carbon atoms, or bicycloalkyl with 7 to 10 carbon atoms is substituted by one or several identical or different substituents selected from the group of:
  - a halogen,
  - an hydroxy group,
  - an alkoxy radical containing 1 to 4 carbon atoms,

- a piperidinyl,
- a morpholinyl,
- a piperazinyl-1,
- a cycloalkyl with 3 to 6 carbon atoms,
- a cycloalkenyl with 4 to 6 carbon atoms,
- a phenyl,
- a cyano,
- a nitro,
- a carboxy,
- an alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, and
- a phenyl.
- 24. (New) The compound according to claim 23, wherein said piperazinyl-1 is substituted at -4 by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl part which contains 1 to 4 carbon atoms.
- 25. (New) The compound according to claim 23, wherein said phenyl is substituted by one or several identical or different radicals, chosen from
  - an alkyl radical with 1 to 4 carbon atoms,
  - an alkoxy radical containing 1 to 4 carbon atoms, and
  - a saturated or unsaturated nitrogenous heterocyclic radical containing 5 or 6 members.
- 26. (New) The compound according to claim 25, wherein said saturated or unsaturated nitrogenous heterocyclic radical containing 5 or 6 members is substituted by one or several alkyl radicals with 1 to 4 carbon atoms.
- 27. (New) The compound according to claim 22, wherein at least one of said cycloalkyl, cycloalkenyl or bicycloalkyl radicals is substituted by one or several alkyl radicals with 1 to 4 carbon atoms.

- 28. (New) The compound according to claim 2, wherein Sc is a linear or branched alkyl radical with 1-12 carbon atoms, an alkenyl with 2 to 12 carbon atoms, an alkynyl with 3 to 12 carbon atoms, a cycloalkyl with 3 to 6 carbon atoms, a cycloalkenyl with 4 to 6 carbon atoms or a bicycloalkyl with 7 to 10 carbon atoms substituted by one or several substituents chosen from
  - a halogen,
  - an hydroxy group,
  - an alkoxy radical containing 1 to 4 carbon atoms,
  - a piperidinyl,
  - a morpholinyl,
  - a piperazinyl-1,
  - a cycloalkyl with 3 to 6 carbon atoms,
  - a cycloalkenyl with 4 to 6 carbon atoms,
  - a phenyl,
  - a cyano,
  - a nitro,
  - a carboxy,
  - an alkoxycarbonyl, the alkyl part of which contains 1 to 4 carbon atoms, and
  - a phenyl.
- 29. (New) The compound according to claim 28, wherein said piperazinyl-1 is substituted at -4 by an alkyl radical with 1 to 4 carbon atoms or by a phenylalkyl radical, the alkyl part of which contains 1 to 4 carbon atoms.
- 30. (New) The compound according to claim 28, wherein said phenyl is substituted by one or several radicals, chosen from
  - an alkyl radical with 1 to 4 carbon atoms,
  - an alkoxy radical containing 1 to 4 carbon atoms, and
  - a saturated or unsaturated nitrogenous heterocyclic radical with 5 or 6 members.
  - 31. (New) The compound according to claim 30, wherein said saturated or

unsaturated nitrogenous heterocyclic radical with 5 or 6 members is substituted by one or several alkyl radicals with 1 to 4 carbon atoms.

- 32. (New) The compound according to claim 2, wherein Sc is a cycloalkyl with 3 to 6 carbon atoms, a cycloalkenyl with 4 to 6 carbon atoms or a bicycloalkyl with 7 to 10 carbon atoms substituted by one or several alkyl radicals containing 1 to 4 carbon atoms.
- 33. (New) The process according to claim 3, wherein said metal carbene catalyst of step c) is Grubbs's catalyst.
- 34. (New) A process according to claim 3, comprising an additional final step of modification of functional groups, said modification being selected among an oxidation, reduction, esterification, alkylation or isomerization reactions.
- 35. (New) The process according to claim 4, wherein said metal carbene catalyst of step c) is Grubbs's catalyst.
- 36. (New) The process according to claim 4, comprising an additional final step of modification of functional groups, said modification being selected among an oxidation, reduction, esterification, alkylation or isomerization reactions.
- 37. (New) The method of treating cancer which comprises administering an effective amount of a compound according to claim 1 in a medicine to a patient in need thereof.
- 38. (New) The method of treating cancer which comprises administering an effective amount of a compound according to claim 2 in a medicine to a patient in need thereof.